

ROCKY FLATS ENVIRONMENTAL
TECHNOLOGY SITE

DRAFT
**Decommissioning
Program Plan**

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2 **1. INTRODUCTION**

3

4 As required by the Rocky Flats Cleanup Agreement (RFCA), this Decommissioning
5 Program Plan (DPP) establishes the regulatory steps to be used for decommissioning
6 contaminated buildings at the Rocky Flats Environmental Technology Site (Site) The
7 decommissioning process is only one part of a building's disposition, disposition starts
8 when the building's mission ends and may encompass deactivation, decommissioning,
9 including decontamination and release for reuse or dismantlement, demolition and
10 environmental restoration Different areas within a single building can be at different
11 phases in the disposition approach, e g , one room can be undergoing deactivation, while
12 the rest of the building is in post-deactivation For those buildings where Special Nuclear
13 Materials (SNM) activities never took place, the disposition process will begin with post-
14 deactivation

15

16 Decommissioning is a series of activities that commences with the conclusion of
17 deactivation and follows through to environmental restoration For a more detailed
18 definition of decommissioning, see §1 1 2 During the decommissioning phase, all
19 buildings, utility systems, infrastructure systems and related facilities at the Site will be
20 dismantled and/or demolished safely and efficiently using appropriate procedures and
21 work controls

22

23

24 **1.1 RFCA Framework**

25

26 On July 19, 1996, the Department of Energy (DOE), Environmental Protection Agency
27 (EPA) and Colorado Department of Public Health and Environment (CDPHE) executed
28 RFCA RFCA is the Federal Facility Agreement pursuant to the Comprehensive
29 Environmental Response Compensation and Liability Act (CERCLA) and Consent Order
30 under the Resource Conservation and Recovery Act (RCRA) and Colorado Hazardous
31 Waste Act (CHWA) RFCA replaces the Interagency Agreement between these parties
32 that had been in place since 1991 RFCA regulates the Site cleanup under the three
33 statutes The Rocky Flats Vision (Vision), RFCA Appendix 9, guides virtually all
34 activities at the Site, including those required by RFCA Among other things, the Vision
35 for Rocky Flats is to achieve accelerated cleanup and closure of the Site in a safe,
36 environmentally protective manner and in compliance with applicable state and federal
37 environmental laws All work done at the Site to achieve the Vision is scheduled through
38 a unified planning process that is captured in the Integrated Site-wide Baseline, as
39 described in RFCA ¶¶s 136 to 141

40

41 RFCA coordinates DOE's response obligations under the Comprehensive Environmental
42 Response, Compensation and Liability Act (CERCLA), closure obligations under the
43 Colorado Hazardous Waste Act (CHWA) and corrective action obligations under CHWA

and the Resource Conservation and Recovery Act (RCRA), as well as the remedial activities regulated under the Federal Facility Compliance Act for treatment of mixed wastes generated by RFCA-regulated activities. RFCA §§ 11 and 12. DOE's decommissioning activities will be conducted as CERCLA removal actions, consistent with RFCA § 96, the joint DOE-EPA May 22, 1996 policy regarding decommissioning of DOE facilities, and RFCA attachment 9. RFCA also established a consultative process among the parties to ensure the efficient implementation of Site closure. See, RFCA Part 7. Also, RFCA divides the Site into two major operable units--the Industrial Area and the Buffer Zone, and designated a Lead Regulatory Agency (LRA) for each. The LRA has primary authority to review and approve regulatory decision documents throughout the cleanup and closure of the Site until the end of the process at which time both EPA and CDPHE need to agree that the Site has been cleaned up to the degree required by their respective authorities. See, RFCA §§ 67 to 69.

1.1.1 Working Relationships

All parties to this DPP recognize that the decommissioning of buildings at the Site, especially former plutonium production buildings, will be a lengthy and complicated process. The parties also recognize that the work to be performed in dispositioning buildings at the Site is unprecedented in many respects. This includes the establishment of working relationships among DOE, its contractors, the regulators and the general public. It is the intent of the parties to this DPP to establish and maintain working relationships that encourage information sharing and effective dialogue among all persons with an interest in the Site building disposition program.

In implementing the DPP, the parties commit themselves to working collaboratively with one another and with the public. The parties explicitly recognize and support RFCA Appendix 2, "Principles for Effective Dialogue and Communications at Rocky Flats," and agree to use their best efforts to employ these principles in their respective roles in implementing the Site decommissioning program.

More specifically, the parties intend to use the following principles to implement this DPP:

- 1) Timely sharing of information – All parties will use their best effort to share project and program information in a timely manner. DOE will inform the regulators on an ongoing basis of building disposition activities. Sitewide, including decommissioning and pre-decommissioning activities. Information sharing efforts may include but need not be limited to: updates of the overall Site closure baseline, briefings on the development of annual work plans and budgets, briefings on changes to approved baselines affecting building disposition activities, and invitations to attend project status briefings. CDPHE and EPA recognize their responsibility to provide timely comments on decision documents and other documents for which their comments have

88 been requested, and agree to raise concerns regarding the Site building
89 disposition program and projects in a concise and timely manner
90

91 2) Collaborative discussions of program changes – All the parties to the DPP
92 recognize that changes in program and project approach will occur on an
93 ongoing basis as buildings are dispositioned at the Site. These changes may
94 arise due to unforeseen conditions, because of the Site's desire to continually
95 attempt to accelerate closure, or for other reasons. As an example, the Rocky
96 Flats Field Office (RFFO) Site Change Control Board, which controls the Site
97 baseline, has recently adopted a policy for certain plutonium buildings
98 undergoing closure. This policy gives preference for funds saved in these
99 buildings' baselines to be redirected within those buildings to accelerate
100 closure activities there. Changes in program or project approach may be
101 necessary or desirable despite DOE's best efforts to present the regulators and
102 the public with a comprehensive plan for building disposition activities. In
103 such circumstances, DOE intends to inform the regulators and the public as
104 soon as possible of significant changes to its building disposition program,
105 especially those that would necessitate formal regulatory or public
106 involvement (such as actions that would require a new decision document, or
107 would substantially modify an existing one). In turn, CDPHE and EPA agree
108 to work with DOE to review and provide input on changes in a timely manner.
109 The goal of all parties in this regard shall be to raise and resolve issues
110 without delaying building disposition activities. —

111
112 3) Designation and use of project points of contact for information exchange and
113 resolution of issues – All parties agree to designate points of contact for
114 disposition activities occurring in individual buildings or building clusters as
115 appropriate. DOE will additionally provide project point of contact
116 designations for its integrating contractor. All parties anticipate that ongoing
117 interactions among project points of contact will be the primary means of
118 exchanging project information, for the review of regulatory documents [such
119 as, Decommissioning Operations Plans (DOP's), Interim Measure/Interim
120 Remedial Action (IM/IRA's) and Project Action Memorandums (PAM's)]
121 while they are in development, for answering questions and resolving issues,
122 and for seeking and receiving regulatory decisions as described elsewhere in
123 this DPP. All parties believe that frequent, open communication among
124 project points of contact is critical to effective implementation of the Site's
125 building disposition program. —

126
127 4) Respect for the roles and responsibilities of the parties – Per RFCA Appendix
128 2, all the DPP parties have "distinct roles and independent decision-making
129 responsibilities" in implementing the Site building disposition program. In
130 general, DOE's role is to oversee program and project planning, to approve
131 baselines and changes to these baselines, to prioritize and select work to be
132 performed, and to oversee its contractors. As part of the latter function, DOE

staff may review and comment on documents prepared by its contractors prior to their dissemination to the regulators or the public while remaining cognizant of issues, resolutions, and agreements identified in prior consultative interactions. In general, it is the regulators' role to oversee the planning and implementation of building disposition work to ensure the protection of human health and the environment, to monitor compliance with RFCA and other environmental statutes, regulations and enforceable agreements, and, to approve documents and make decisions as outlined herein and in RFCA. All parties additionally recognize the oversight role of the (DNFSB) Nuclear Facilities Safety Board, as described in RFCA Appendix 1, "Memorandum of Understanding Governing Regulation and Oversight of Department of Energy Activities in the Rocky Flats Environmental Technology Site Industrial Area." Recognition of these respective roles, however, is not intended to in any way restrict the open flow of information among DOE, CDPHE, EPA and the DNFSB regarding the building disposition program. Similarly, discussions of specific roles and responsibilities within this DPP are not intended to abrogate any parties' authorities or responsibilities under RFCA or any other applicable statute, regulation or agreement.

- 5) Training – The parties to this agreement agree to develop and provide joint training for their respective staffs, DOE contractors and interested member of the public to assist in the implementation of this DPP.

Finally, all parties recognize that informing the public, and meaningfully responding to public input and public concern, is integral to the success of the Site building disposition program. All parties intend to be active in informing the public in an open and timely manner regarding planned and ongoing program activities. All parties will try to inform the public and seek their input regarding planned activities well in advance of prescribed comment periods. When disagreements among the parties are discussed in a public forum, the parties agree to discuss such disagreements in an objective, professional and informative manner, and to consider public input in resolving such disagreements.

1.1.2 Definition of Decommissioning and Deactivation ✓

In ¶ 25(z), RFCA defines decommissioning as

for those buildings, portions of buildings, structures, systems or components (as used in the rest of this paragraph, "building")¹ in which deactivation occurs, all activities that occur after the deactivation. It includes surveillance, maintenance, decontamination and/or dismantlement for the purpose of retiring the building from service with adequate regard for the health and safety of workers and the public and protection of the environment. For those buildings in which no

¹ This DPP follows the RFCA convention insofar as the term building may mean a building, portion thereof, structure, system or component.

175 deactivation occurs, the term includes characterization as described in Attachment
176 9, surveillance, maintenance, decontamination and/or dismantlement for the
177 purpose of retiring the building from service with adequate regard for the health
178 and safety of workers and the public and protection of the environment The
179 ultimate goal of decommissioning is unrestricted use, or if unrestricted use is not
180 feasible, restricted use of the buildings

181

182

183 The following are examples of specific end points for deactivation Not all end points
184 will apply in all buildings which go through a deactivation process

185

- 186 • a determination that the probability of a criticality event in the building is
187 considered not credible ,
- 188 • removal of all combustibles that are not integral parts of the building,
- 189 • removal of all classified materials,
- 190 • removal of other hazards as needed to place the building in a safe and stable
191 condition, and
- 192 • a shift in primacy from Atomic Energy Act oversight of the Defense Nuclear
193 Facility Safety Board to CERCLA regulation through RFCA by EPA and
194 CDPHE

195

196 Activities such as waste chemical removal, disposition of excess property, chemical
197 hazards reduction and placement of RCRA units into RCRA stable condition or their
198 closure may occur either during deactivation or decommissioning

199 **1.1.3 DPP**

200

201 The DPP is the RFCA document that describes the steps for accomplishing the Vision of
202 closing Rocky Flats, in terms of decommissioning buildings for their removal or reuse It
203 establishes the overall framework for decommissioning a building leading up to either its
204 release for reuse or its demolition and disposal It elaborates on the relevant portions of
205 the building disposition process described in RFCA Attachment 9 For each building on
206 Site, the DPP describes a process that starts with a scoping meeting, proceeds to a
207 reconnaissance level survey for contamination and a hazard assessment, follows the
208 report of these activities' findings with the removal of contamination or physical hazards
209 identified and ends, for those buildings requiring decontamination, with a final
210 characterization survey to document that the building is ready for reuse or dismantlement
211 and demolition Depending on the level of contamination, decontamination may be
212 required for the buildings, or parts of the building In some instances, decontamination
213 may not be practicable and the building may be dismantled and demolished as low level
214 or low level mixed waste Consistent with Section 3 4 4, buildings determined after the
215 reconnaissance level characterization to be free of contamination may go directly to reuse,
216 dismantlement or demolition using applicable federal property disposition rules The Site
217 will also follow, as necessary, any other applicable legal requirement associated with the
218 disposal of excess federal property, including the remediation of hazards associated with

219 materials containing polychlorinated biphenyls (PCBs) and asbestos. The DPP also
220 describes the dismantlement and demolition process, including the process for waste
221 management and possible on-site disposal. Pursuant to RFCA ¶ 119(k), the DPP is a
222 site-wide decision document subject to the review and approval of both EPA and
223 CDPHE
224

225 114 Requirements for DOPs and Other Decision Documents

226
227 Pursuant to RFCA Attachment 9, "Building Disposition," a Decommissioning Operations
228 Plan (DOP) will be developed for any building found, as a result of reconnaissance level
229 characterization, to have significant radioactive contamination or hazards. The DOP will
230 present an activity-based program to decontaminate the locations identified in that
231 building's reconnaissance characterization study as contaminated or presented a physical
232 hazard. The DOP will include risk, economic and engineering assessments. Pursuant to
233 RFCA ¶ 118(l), DOPs for major nuclear facilities are decision documents subject to the
234 review and approval of the LRA. Since all of the Site's major nuclear facilities are
235 located in the Industrial Area, the practical outcome of this direction is that CDPHE, the
236 LRA in the Industrial Area, will be the agency reviewing and approving DOPs. Also,
237 since it appears likely that the decommissioning of each building needing a DOP will take
238 at least six months to complete, the Site intends to develop and seek approvals for the
239 DOPs through the IM/IRA process
240

241 If DOE proposes to take actions that appear to require a RFCA decision document, the
242 Site project point of contact will seek concurrence from the Lead Regulatory Agency
243 (LRA) before performing the actions. In seeking this concurrence, DOE will provide the
244 LRA with data and a description of work that demonstrate that the work can be performed
245 without a threat of release. This demonstration may be made informally to the LRA
246 project point of contact, with concurrence documented for the building administrative
247 record. The Site and LRA point of contact will use the "RFCA Decision Document
248 Requirement Method" (see next paragraph) to determine if the actions require preparation
249 of a RFCA decision document. The parties to this DPP anticipate that this and other
250 questions regarding the necessity of decision documents for performing building
251 disposition work will be resolved through ongoing consultation among the respective
252 project points of contact
253

254 The following method provides the screen the Site and LRA project points of contact will
255 use in determining if a RFCA decision document is needed for a specific activity or
256 related group of activities
257
258

RFCA Decision Document Decision Method

- I Purpose
 - A Provide a decision method (screen) to facilitate determining if an activity or related set of activities would be classified as requiring a RFCA decision document, that is, a DOP, PAM, IM/IRA or RFCA Standard Operating Protocol (RSOP)
- II The method facilitates
 - 1 implementing the consultative process,
 - 2 project planning at an early stage (scope, schedule, budget),
 - 3 determining if waste is "process" or remediation waste,
 - 4 determining National Environmental Policy Act (NEPA) document requirements,
 - 5 stakeholder involvement and schedule,
 - 6 determining if a RFCA decision document is needed
- III The method is for use by
 - A the project points of contact,
 - B oversight organizations internal and external to the Site
- IV Method
 - A The Site project point of contact will determine the initial scope and schedule for the activity and related activities
 - B The Site project point of contact will do an initial screen to determine if activity is decommissioning using the following screen
A RFCA decision document (such as a PAM, IM/IRA or DOP) will be prepared and regulatory approval received before an activity is undertaken that meet all of the following criteria
 - 1) is not considered "maintenance"² or process waste management³, and
 - 2) does not support SNM removal for the purpose of deactivation or other pre-decommissioning actions, and
 - 3) involves work that will impact systems or equipment contaminated with radiological or other hazardous substances, and
 - 4) relates to the building proper (that is, removal of fixed equipment and structural components as opposed to moveable equipment,

² "Maintenance" includes all activities that are necessary to continue a building's current mission, maintain a building's safety envelope, or modify a building for a change in mission (except a change of mission to decommissioning) Removal of fixed equipment for reuse on- or off-site will be considered maintenance This does not include removing equipment for recycling or disposing of it as waste

³ "Process waste" means waste generated before "decommissioning" commences for the activity being analyzed

- containerized chemicals, solutions in tanks, etc) but exclude follow-on environmental remediation activities, and
- 5) is not otherwise regulated, such as RCRA closure, asbestos and polychlorinated biphenyl removal, underground storage tank closures, etc

Figure 1 1-1 provides a flowchart of the above criteria

Some activities that do not meet all of these criteria may be included for information in some decision documents

- C If the initial screen shows the activity may require a RFCA decision or is in the "gray area" between what may or may not need a RFCA decision document, the Site project point of contact will arrange a consultative briefing of the regulators. The briefing will include a discussion of the scope and schedule for the project. The briefing should follow the format established in the DPP for DOP content to ensure the discussion is focused and the information typically needed by the LRA is presented in a reasonably consistent format. The graded approach should be used in determining the level of detail for the briefing.
- D The Lead Regulatory Agency (LRA) will review the results of the Site's screen to determine if it agrees with the Site determination.
- E If the collaborative agreement is that the activity does not require a RFCA decision document, the Site project point of contact will
- document the agreement in the manner agreed to during the meeting with the LRA project point of contact, and
 - document the decision in the Administrative Record, and
 - monitor the project scope to ensure it remains within that agreed to, and
 - notify the LRA before the project goes out of scope if possible, in sufficient time to initiate consultation with the LRA on the issue.
- F If the collaborative agreement is that the activity does require a RFCA decision document, the following actions will occur
- 1 The consultative process will follow the requirements in RFCA and the DPP to determine what type of decision document is needed. The LRA will identify as specifically as possible what, if any, additional information is needed for approval of the activity. This will include information needed by the SRA.
 - 2 A schedule will be agreed to for
 - a) the Site to provide the additional information,
 - b) the LRA to complete its review of the information,
 - c) the public comment period and review times,
 - d) any other schedule issues involving both the Site and the LRA, and,
 - e) the Site to provide any additional information

- 3 The Site will then draft the decision document and involve the regulators as the document is drafted

259 Insert figure 1 1-1

260

261 **1.1.5 RSOPs**

262

263 RFCA Standard Operating Protocols are defined in RFCA as “approved protocols
264 applicable to a set of routine environmental remediation and/or decommissioning
265 activities regulated under this Agreement that DOE may repeat without re-obtaining
266 approval after the initial approval because of the substantially similar nature of the work
267 to be done ” Currently, DOE intends to incorporate the information necessary for the
268 approval of decommissioning work into project-specific decision documents such as
269 DOP’s, PAM’s or IM/IRA’s As the decommissioning program matures, the Site and the
270 regulatory agencies may decide to adopt the use of RSOPs which would be developed
271 through the RFCA process, including public review and comment

272

273

274 **2 BUILDING DISPOSITION**

275 **2.1 Goal of Building Disposition**

276

277 Building disposition is the sequence of activities required to take a facility from its
278 existing condition to final disposition The goal of disposition is for the Site to
279 accomplish all of the activities necessary either to demolish the building and dispose of
280 the resulting waste or to release the building for reuse

281

282 As discussed in RFCA Attachment 9, unless building specific conditions otherwise
283 warrant, the activities denoted below are typical, but not all inclusive, of those that will be
284 performed in each building

285

- 286 a) containerized waste and materials removed,
- 287 b) liquid waste and processing systems drained,
- 288 c) RCRA units closed or have a closure plan integrated with building disposition
289 plan
- 290 d) all TRU waste, defined as materials in excess of 100 nanocuries per gram,
291 removed,
- 292 e) equipment, piping, ducts, glove boxes, and major electrical components
293 removed (e g , strip out)
- 294 f) radioactive hot spots and hazardous substances removed, and
- 295 g) easily removed contamination removed

296

297 **2.2 Building Classification**

298

299 The Site will sort its buildings into three types, based on differing levels of
300 contamination, each with its own degree of regulation The Reconnaissance Level
301 Characterization will be used to determine the building type

302

303 *Type 1 Buildings free of contamination*⁴

304

305 "Free of contamination" means that the following conditions have been met

306

- 307 • Hazardous wastes, if any, generated and/or stored in the facility have been
- 308 previously removed in accordance with CHWA and RCRA requirements and any
- 309 RCRA units have been closed or, if partially closed, the parts of the unit within
- 310 the facility have been certified as being clean closed, (It will be insufficient to
- 311 have RCRA units simply in a RCRA stable configuration), AND
- 312 • Radioactive materials were not stored or used in the building, AND
- 313 • Surveys, if required, for radiological or hazardous substance contamination show
- 314 the building is not contaminated, AND
- 315 • If any hazardous substances including PCBs or asbestos are present, they are an
- 316 integral part of the building's structural, lighting, heating, electrical, insulation or
- 317 decorative materials As such, they are not "contamination "

318

319 Since the presence or absence of physical or safety hazards, while important to the Site in
320 terms of how to proceed with a building's disposition, is not a determinant of whether it
321 will be regulated pursuant to RFCA, DOE will not consider such hazards in categorizing
322 a building as Type 1

323

324 *Type 2 Buildings without significant contamination or hazards, but in need of*
325 *decontamination*

326

327 Type 2 buildings contain some radiological contamination or substantial hazardous
328 substance contamination The extent of the contamination is such that routine methods of
329 decontamination should suffice and only a moderate potential exists for environmental
330 releases during decommissioning Some buildings in this category, e g , 865, 886 and
331 991, are now undergoing, or will undergo deactivation in certain areas prior to
332 decommissioning The mere fact that deactivation will occur does not push a building
333 into the Type 3 category Most buildings where industrial operations occurred that used
334 hazardous substances or radioactive materials or both will fall into this category

335

336

337 *Type 3 Buildings with significant contamination and/or hazards*

338

339 Type 3 buildings contain extensive radiological contamination, usually as a result of
340 plutonium processing operations or accidents Contamination may exist in gloveboxes,
341 ventilation systems, or the building structure Site personnel expect those buildings that
342 were used for plutonium component production, along with the major support buildings

⁴ NOTE DOE may choose to remove materials containing polychlorinated biphenyls (PCBs) and asbestos pursuant to other laws which regulate DOE actions independently from RFCA

343 for such production, will have significant contamination, and are therefore expected to be
344 classified as Type 3 These buildings include

345

346 •371/374 •559 •771/774

347 •707 •776/777 •779

348

349

350 2.3 Project Approach

351

352 A "project" approach is the most effective way to disposition a building To handle a
353 single building or cluster of buildings as a project means to encompass deactivation and
354 decontamination, if necessary, and preparation for reuse or dismantlement/demolition and
355 environmental restoration for under-building contamination in a unified work package
356 and planning effort Note that for some non-nuclear buildings, the end of the mission will
357 be the beginning of decommissioning, i e , there would not be a separate deactivation
358 phase

359

360 While the Site will apply the project approach to all buildings, for regulatory purposes,
361 the DPP governs only those decommissioning activities from the end of deactivation to
362 the beginning of environmental restoration Mission activities and deactivation are not
363 within the scope of RFCA regulation, but will continue to be regulated under the Atomic
364 Energy Act and overseen by the Defense Nuclear Facilities Safety Board, while
365 environmental restoration will be regulated elsewhere under RFCA Certain incidental
366 activities, such as waste management and the closure of RCRA units may either be
367 regulated as part of this DPP or through other existing mechanisms by CDPHE and EPA
368 However, some incidental activities, such as the disposition of excess equipment, are
369 within the purview of DOE, subject to applicable law

370

371 2.3.1 End of Mission

372

373 At such time as DOE declares that a building no longer has a mission-related use, the
374 building enters its disposition phase Based on preliminary planning efforts, DOE will at
375 that time make the determination to either dismantle or release the building for reuse
376 Certain building operations will continue, for example

377

- 378 • to disposition excess chemicals or equipment,
- 379 • to perform surveillance and maintenance, and
- 380 • to provide risk reduction from Site hazards to the worker, the public and the
- 381 environment

382

383 Closure of RCRA units and the collection, packaging, storage and shipment of wastes
384 stored in the building or generated during the above-listed activities may also occur
385 Each of these activities is regulated through other means Because some buildings are

386 needed to support disposition activities in other buildings, they may continue to operate
387 until the buildings they support are through the disposition process
388

389 2 3 3 Building Decommissioning

390

391 RFCA's definition of decommissioning is quoted above in § 1 1 2 Decommissioning
392 will commence, either in an entire building or a part thereof, when deactivation, whose
393 end points are discussed in section 1 1 2 is complete In non-nuclear buildings,
394 decommissioning may begin as soon as the building's mission is at an end In some
395 buildings, decommissioning may run concurrently with deactivation If so, the DOP will
396 identify how the Site will manage each suite of activities
397

398 The following list of examples of decommissioning activities should help delineate that
399 portion of the disposition continuum which is regulated as decommissioning under RFCA
400 and is therefore covered by this DPP
401

- 402 • characterization of contamination
- 403 • hazards identification
- 404 • decontamination in preparation for release for reuse or dismantlement
- 405 • strip out and removal of glove boxes, ducts and tank/process equipment
- 406 • size reduction of glove boxes, ducts and tank/process equipment
- 407 • waste minimization activities associated with decommissioning
- 408 • dismantlement
- 409 • demolition
- 410

411 As stated above in § 2 3 3, certain activities may occur either during deactivation or
412 decommissioning These include waste chemical removal, disposition of excess
413 property, reduction of chemical hazards and the placement of RCRA units into RCRA
414 stable condition or their closure
415

416 The Site has more than 200 buildings that supported nuclear weapons production, but
417 were never defined as defense nuclear facilities Their total floor area is estimated to be
418 nearly two million square feet Many contaminated buildings where SNM activities
419 never took place are ready for the decommissioning phase now with surveillance and
420 maintenance as the current activity These buildings will be decommissioned pursuant to
421 this DPP and available PAMs or IM/IRAs, and possibly RSOPs, if used in the future
422

423 2 3 4 Waste Management

424

425 RFCA provides that process wastes and wastes generated during deactivation are
426 CHWA/RCRA-regulated, whereas wastes generated during decommissioning are
427 CERCLA-regulated RFCA §§ 70-71 However, as described in §§ 2 3 2 and 2 3 3
428 above, there will be times when the Site will be engaged simultaneously in deactivation

and decommissioning in some buildings. At such times, it may prove safer, more cost effective and more expeditious from an operational stance, to manage the wastes generated from both activity in the same manner. For example, if Site personnel engaged in deactivation and decommissioning in different rooms of the same building are both generating mixed transuranic wastes, the project point of contact may choose to store all such waste in a single area and commingle such wastes in common containers. If this practice occurs, the wastes will be managed under CHWA/RCRA, although the RCRA decision document would discuss the proposed waste management strategy.

2.3.5 Environmental Restoration

Environmental Restoration constitutes those activities necessary to characterize, assess and remediate contamination in soils, sediments, surface and ground water from past nuclear weapons production activities. One goal of environmental restoration is to follow the CERCLA process so that a DOE property like the Site is ultimately removed from the National Priorities List. Typically, the Site removes contamination to satisfy a risk-based standard or environmental requirement for the medium affected. Environmental restoration at the Site will include remediation of all under building contamination after the removal of building foundations or slabs. Such remediation will conform to the standards established in RFCA Attachment 5 and the final applicable or relevant and appropriate requirements (ARARs) selected for the Site. This DPP does not regulate environmental restoration, however this discussion has been included to make clear that, while the decommissioning that the DPP does regulate is part of a broader process, other phases in that process are regulated elsewhere.

3 BUILDING DECOMMISSIONING

3.1 Maintaining the Administrative Record

As a CERCLA decision document, upon approval, the DPP will be placed into the Site-wide Administrative Record. Subsequent decommissioning actions requiring regulatory approval, e.g., RSOPs, PAMs, IM/IRAs and DOPs, will have separate Administrative Records. DOE will also place documents used in the regulatory decision-making process, such as, the Reconnaissance Level Characterization, in the Administrative Record. For RSOPs, the Administrative Record will remain open until the record is closed for the Industrial Area Operable Unit so that all notifications made pursuant to the RSOP will become part of a single Administrative Record file. Since the Administrative Record will otherwise be closed at the time of a decision document's, i.e., a PAM', IM/IRA' or DOP's, approval, operational documents generated after the administrative record has been closed, e.g., a Demolition Closure Report, will be incorporated into a Post-Decisional File for the action that will be part of the Industrial Area Administrative

470 Record File DOE will follow the Site Level 1 Procedure regarding administrative
471 records
472
473 For Type 1 buildings, a project specific administrative record is not required for the
474 project However, the reconnaissance level characterization report and close-out report
475 must be included in the administrative record as either a project -specific file or placed
476 within the appropriate operable unit (OU), that is, industrial area OU or buffer zone OU
477 These documents are required to be placed in the administrative record because these
478 documents will support the final Corrective Action Decision/Record of Decision
479 (CAD/ROD) for the OU
480

3.2 Decommissioning Activities undertaken prior to approval of the DPP

Until such time as the DPP is final, decommissioning activities may occur at the Site pursuant to an approved DOP, PAM or IM/IRA. RFCA describes the approval process for such decision documents in ¶¶s 106 and 107.

3.3 Integrated Site-Wide Baseline

Planning activities for decommissioning are underway at most buildings. Site personnel schedule building decommissioning work and ensure the integration of such work with other Site activities by including such work on a controlled master resource-loaded critical path method schedule, referred to in RFCA, Part 11, Subpart A, as the Integrated Site-wide Baseline. The Integrated Site-wide Baseline contains the entire building disposition schedule. Both CDPHE and EPA review and approve the Baseline, including revisions, annually.

3.4 Decommissioning Activities

Once DOE has decided to proceed with decommissioning a particular building or group of buildings, has completed any precursor activities (such as deactivation), and has scheduled the work on the Integrated Site-wide Baseline, the decommissioning process begins. Figure 3 4-1 is a flowchart showing the regulatory path for each Site building.

3 4 1 Scoping

With the information known to date about the project, the project points of contact from the Site and the LRA will engage in the RFCA consultative process to discuss the scope of the decommissioning action for Types 2 and 3 buildings, including the schedule, budget, risks and approach for performing the work. This will include agreeing to the length of the public comment period.

3 4 2 Facility Walk Down

Site personnel will perform a facility walk down to obtain the information necessary to prepare the hazard assessment and the Reconnaissance Level Characterization Report (RLC Report).

517

518 Figure 3 4-1

519

520 *This flow chart will be modified as agreed to show the readiness review box for both*

521 *Type 2 and 3 facilities*

522 3 4 2 1 Perform Hazard Assessment

523

524 RFCA Attachment 9 and prudent business practices require that the Site identify safety
525 and physical hazards as part of the initial building reconnaissance. The management and
526 resolution of such hazards occurs outside of the RFCA regulatory framework. The safety
527 and physical hazard assessment will help Site personnel determine the possible risks to
528 workers, the public and the environment during decommissioning.

529

530 To identify and control hazards, the Site will follow the process set out in its Integrated
531 Safety Management process description and implementation plan (ISM). The ISM was
532 initially developed in March 1997 in response to DNFSB Recommendation 95-2. The
533 ISM integrates the identification, analysis and control of hazards and provides feedback
534 for improvement. The ISM consists of five core safety management functions.

535

- 536 • define the scope of work
- 537 • identify and analyze hazards associated with the work
- 538 • develop and implement hazard controls
- 539 • perform the work within such controls, and
- 540 • provide feedback on the adequacy of the controls

541 3 4 2 2 Reconnaissance Level Characterization

542

543 The Reconnaissance Level Characterization (RLC) produces an overall assessment of the
544 contamination, hazards, and other conditions associated with each building. The
545 radiological and chemical (including PCBs and asbestos) condition of the building will be
546 assessed in order to identify radioactive or hazardous waste storage areas, contaminated
547 areas and hazards, as well as physical obstacles or other conditions that could affect
548 decommissioning activities. The RLC will contain sufficient detail including analysis of
549 analytic information to establish the basis for decommissioning activities.

550

551 The RLC will locate or confirm previously located quantities of SNM. The RLC will
552 include a room-by-room review of quantities of radioactive or hazardous materials or
553 chemicals that require special work controls to complete decommissioning safely. In all
554 cases, the team performing the RLC will check the historic information against current
555 observed conditions, will identify and record areas with loose or fixed contamination and
556 will note unclosed RCRA units and idle equipment still in residence. The project points
557 of contact and staff use the RLC to provide input to the preparation of the health and
558 safety analysis, the determination of the engineering support requirements, and the
559 determination of appropriate milestones.

560

561

562

563 3 4 4 Prepare Reconnaissance Level Characterization Report

564

Based on the RLC, the Site will prepare a report for transmission to the LRA that summarizes the results of the RLC and provides an analysis of the risks presented in the building. The Site will use the methods and characterization protocols in the *Decommissioning Characterization Protocols*, process knowledge, the facility walkdown, and historical information to develop the RLC report. DOE will use the information from the RLC to confirm its typing of the building, and will transmit the RLC report and a notification letter to the LRA for concurrence. The notification letter will include DOE's determination as to the building type. The LRA will have fourteen days to concur with DOE's determination or to non-concur and state in writing its reasons for non-concurrence. For Type 1 buildings, if the LRA does not transmit its written non-concurrence (along with the reasons for non-concurrence) within fourteen days, DOE may begin decommissioning of the building(s) in question. If the LRA does not concur with DOE's determination, DOE and the LRA will meet to attempt to resolve the reasons for the LRA's non-concurrence, using the consultative process. If these differences cannot be resolved, the RFCA dispute mechanism may be invoked by any party. DOE will provide the RLCR and notification letter for a building sufficiently in advance of decommissioning to allow for the fourteen day concurrence cycle by the LRA, and to allow for consultative resolution of disagreements should they arise.

A Reconnaissance Level Characterization Report (RLCR) will be submitted to the LRA prior to "mothballing" or prior to beginning decommissioning.⁵ In addition, whenever DOE chooses to "mothball" a facility, DOE will submit a hazards analysis of the facility specific conditions for the mothballed period, meet with the LRA to discuss any potential hazards or releases to the environment which might occur during the mothball period, devise actions to mitigate potential releases in collaboration with the LRA and propose adequate monitoring methods to monitor any release. Any modification to work previously approved in a decision document would be processed in accordance with RFCA, Part 10, Changes to Work.

3.4.5 Type 1 Buildings Decommissioning

Decommissioning of buildings classified as Type 1 (uncontaminated) based on a final reconnaissance level characterization report will not require RFCA decision documents in addition to the DPP and will proceed based on plant procedures.

However, if contamination is discovered during decommissioning of a building classified as Type 1, decommissioning activities in the affected areas will cease until the LRA is notified and the need to reclassify the facility is considered collaboratively.

Discovery of contamination after the determination that the building is Type 1 will not necessarily result in the need to reclassify a building into the Type 2 classification. If contamination can be removed by methods in which there is no threat of release of a

⁵ The term "mothball" is defined as placing a building in a condition where it is no longer actively occupied. Ventilation, heating and air conditioning, and fire detection and protection systems may be turned off. Sump pumps to remove groundwater infiltration may be operating.

605 hazardous substance to the environment, for example by simply cutting out the fixed,
606 contamination, the building may remain as Type 1 Contamination will be cleaned up
607 and disposed properly using existing radiological or hazardous waste management
608 procedures

609 Reclassification as a Type 2 building must be considered in any instance where removal
610 techniques involve a threat of release of a hazardous substance (as determined by the
611 consultative process) to the environment
612

613 No further regulatory involvement for Type 1 buildings will be required for buildings
614 containing asbestos provided the Site follows the requirements of the Site asbestos
615 management program
616

617 For Type 1 facilities containing PCBs that are not contaminated with radioactive
618 materials, no further regulatory involvement will be required provided the Site follows
619 the requirements of the Site PCB management procedures

620 3 4 6 Type 2 Buildings Decommissioning

621
622 Following scoping and characterization, the Site will prepare its internal plan for
623 decommissioning the Type 2 building or cluster of buildings at issue Based on the
624 necessary activities to complete such decommissioning, the Site may be able to take
625 advantage of the streamlined regulatory process that exists if the necessary
626 decommissioning activities fall within the scope of one or more existing RSOPs For an
627 explanation of RSOPs, see § 1 1 5 At the time that this DPP is being written, no RSOP
628 exists Where contemplated decommissioning activities do not fall within an existing
629 RSOP, decommissioning may only proceed pursuant to an approved PAM or IM/IRA
630

631 The table of contents for a DOP will be the same as that for an IM/IRA and is listed in
632 section 3 4 7 1 A graded approach will be discussed with the LRA and will be used in
633 determining the level of detail of the information in the decision documents
634

635 DOE anticipates conducting one or more readiness evaluations prior to and during the
636 course of decommissioning projects The LRA will be notified of the schedule for the
637 readiness evaluation including but not limited to management reviews and environmental
638 readiness evaluations and of the time and location of the initial meeting of the evaluation
639 team designated for each decommissioning project The LRA may designate a participant
640 for regulatory oversight and to accompany the team and attend its meetings It is
641 anticipated that the participant will be the LRA project lead A copy of the readiness
642 evaluation team's final report will be made available to the LRA upon request of its
643 designated participant (*Note this language also appears in Sec 3 4 7 3*)
644

645 3 4 6 1 Release, Review and Approval of RSOPs

646

647 Prior to being able to perform work pursuant to an RSOP, the Site must have obtained
648 initial approval for such RSOP pursuant to RFCA. This requires the Site to scope the
649 RSOP through the consultative process, draft an RSOP for public comment and the
650 review and approval of EPA and CDPHE, prepare a formal response to public comment
651 and obtain EPA's and CDPHE's approval through the IM/IRA process described in
652 RFCA ¶107
653

654 3 4 6 2 Notification of Intent to Proceed under RSOP
655

656 If the planned decommissioning activities fall within the scope of one or more approved
657 RSOPs, then the Site will notify EPA, CDPHE and the public in writing of its intent to
658 proceed with such activities. This notification letter will become part of the
659 Administrative Record for the RSOP(s)
660

661 3 4 6 3 Decommissioning Type 2 Buildings prior to RSOP approval or where activities
662 contemplated are not covered by an RSOP
663

664 Until such time as the Site has an approved RSOP(s) for decommissioning activities, the
665 Site may only perform decommissioning in a Type 2 building pursuant to an approved,
666 building-specific (or building cluster-specific) PAM or IM/IRA. The process for
667 approval of PAMs and IM/IRAs along with the required contents for each are set forth in
668 RFCA ¶¶ 106 and 107. Even at such time as the Site has obtained regulatory approval
669 for an RSOP, some Type 2 buildings may require decommissioning activities that fall
670 outside its scope, thereby requiring building-specific regulatory approval for those non-
671 covered activities
672

673 3 4 7 Type 3 Buildings Decommissioning
674

675 The Site will decommission each Type 3 building pursuant to an individual DOP for the
676 building or building cluster. The list of buildings currently expected to fall within Type 3
677 is in § 2.2
678

679 3 4 7 1 Preparation of DOP
680

681 The DOP will be prepared and approved in accordance with the RFCA IM/IRA approval
682 process. The DOP will contain sufficient information so the regulators can be satisfied
683 that the project can proceed compliantly, with a high probability of success. Support
684 buildings associated with a major project may be included in its DOP if they would be
685 managed in the same project
686

687 DOP AND IM/IRA PLAN TABLE OF CONTENTS

688
689 EXECUTIVE SUMMARY

690
691 INTRODUCTION

- 692
693
 - Include purpose of document and scope Scope will include a
 - 694 description of the facility after decommissioning activities are
 - 695 completed, e g , buildings to slab
 - 696
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BUILDING/CLUSTER DESCRIPTION

- A physical description of building area, a brief operational history, including known releases and fires (based, where the information exists, on the historical release record), identification of RCRA units and CERCLA IHSS's, summary of the RLC Report findings

ALTERNATIVES ANALYSIS & SELECTION

- Include an alternatives analysis and an impact analysis

PROJECT APPROACH

- Description of project including a description of project activities and work and emission controls, performance standards, any included RCRA closure activities, any separate environmental management or compliance approvals needed, and a description of the on-going plan for facility characterization
 - Include Identification of Hazards from the RLCR and how they will be addressed (Recommend use of tables summarizing data)
- Identification of activities to address hazards, including Work/Environmental/Spill(emphasize)/ Effluent controls
 - Identify Decontamination approach
 - Identify need for a Final Radiation Survey Plan and a Decontamination Plan
 - Identify monitoring requirements
 - Identify cleanup levels
- Discuss Authorization Basis (reference documents that identify surveillance and equipment maintenance requirements) and Work Authorization

NOTE Prior to proceeding with decommissioning, a management review of the project's infrastructure, procedures and personnel will be completed by DOE, the LRA and the IMC, such review, to verify that the conditions exist to support the activities safely, may result in changes to the project as described in this document

HEALTH AND SAFETY

- Include a description of the health and safety issues (worker and environmental)
- Include ISM discussion and how safety is built into approach
- Address emergency response
- Summary of hazards from Project Approach above

WASTE MANAGEMENT

- Include a summary of the waste management issues, including those related to disposal
- Identify waste quantities to be generated (TRU, LLW, and sanitary), where it will be staged, and ultimate disposition plans Discuss unknowns and need for flexibility and possible change due to uncertainties with final destinations (Waste Process Flow Chart recommended)
- Duration of storage or staging

COMPLIANCE W/ ARARs

- Includes list of applicable laws, orders, regulations, and CWA or CAA permit requirements, Chemical-, Action- and Location Specific and To-Be-Considered Requirements and Considerations, and RFCA building cleanup criteria and standards

ENVIRONMENTAL CONSEQUENCES OF THE ACTION

- Include description of environmental, socioeconomic and cumulative impacts as a result of the project to geology and soils, air quality, water quality, human health, plants and animals, historic resources, noise levels and the local economy, mitigation measures, unavoidable adverse effects, short-term uses in effect during decommissioning and long-term productivity after the actions are complete, and irreversible and irretrievable commitments of resources
- Address NEPA and relative impact on human health, worker safety, and the environment

- 775 • Address how the requirements have been met for compliance with the
776 National Historic Preservation Act and the programmatic agreement
777 with the Colorado State Historic Preservation Office⁶
778

779 QA/QC
780

- 781 • Include a general description of the quality assurance and control
782 issues
783 • Include the training process to assure worker training is adequate,
784 include a matrix of training requirements specific to the
785 decommissioning project
786

787 IMPLEMENTATION SCHEDULE
788

- 789 • Include a schedule with level of detail addressing room by room (or
790 set) logic and activities (may not need to be to the level identifying
791 individual glovebox, tank or equipment item removal for equipment or
792 sets whose remediation is not complex)
793

794 NOTE This information will be supplied to add clarity to the
795 decision document and to identify the general planned schedule if
796 full funding is available The schedule is not an enforceable part of
797 the document, and DOE or its contractors may deviate from it
798 without penalty and without having to notify or obtain the approval
799 of the LRA in advance
800

801 PROJECT ORGANIZATION
802

- 803 • Includes organization chart of project team, and a description of how
804 project fits into larger facility disposition effort
805

806 NOTE This information will be supplied to add clarity to the
807 decision document and to identify reporting relationships and
808 responsibilities The organizational structure is not an enforceable
809 part of the document and DOE or its contractors may deviate from
810 the organization without penalty and without having to notify or
811 obtain the approval of the LRA in advance

⁶ Sixty-four facilities of the former Rocky Flats Plant have been listed in the National Register of Historic Places as an historic district A Programmatic Agreement with the Colorado State Historic Preservation Officer requires that the facilities be documented using the Historic American Engineering Record (HAER) format before the facilities are significantly altered or demolished The documentation is scheduled for completion in March, 1998 The HAER documentation packages are submitted to the National Park Service for approval Acceptance of the entire documentation package by the National Park Service is expected in the summer of 1998

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COMMENTS AND COMMENT RESPONSIVENESS SUMMARY

REFERENCES

- Include references to other documents used as information sources in the DOP, such as, RFCA, DPP, any RSOPs that would be used, RLC Report, project specific health and safety plan

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3 4 7 2 Submit Draft DOP for public comment and regulatory review and approval

The Site drafts the DOP and DOE submits it to CDPHE (as the LRA) and releases it for public comment pursuant to the RFCA IM/IRA approval process DOE and CDPHE will agree in advance to the length of the public comment period

3 4 8 Notify of Readiness Evaluation Schedule

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The LRA will be notified of the schedule for the readiness evaluation for Type 2 and 3 buildings including but not limited to management reviews and environmental readiness evaluations and of the time and location of the initial meeting of the evaluation team designated for each decommissioning project The LRA may designate a participant for regulatory oversight and to accompany the team and attend its meetings It is anticipated that the participant will be the LRA project lead A copy of the readiness evaluation team's final report will be made available to the LRA upon request of its designated participant

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3.4.9 Perform Physical Work of Disposition Operations

These activities include, for example, dismantling and removing equipment, decontamination of walls, floors, and ceilings, utility system shutdown, and removing internal building components After demonstration that the building meets the established criteria, it will be demolished or reused The requirements and procedures referenced in RFCA decision documents will be followed by workers performing decommissioning This includes lower tier as well as first tier contractor workers

845
846
847
848

3 4 10 Perform and Validate Final Characterization

At the end of the decommissioning, Site personnel will confirm that their activities have achieved the release standard for buildings destined for reuse or the completion of

⁷ Decontamination is performed routinely to control exposure levels so that conditions mandating remedial decontamination do not occur or are significantly delayed/retarded

849 building disposition for buildings that are demolished such that only environmental
850 restoration activities remain
851

852 After the building is demolished, the final characterization will occur. The demolition
853 survey will be conducted in accordance with the Site's characterization protocols, and
854 will provide sufficient data to demonstrate that the Site has successfully completed
855 decommissioning in conformance with the governing RFCA decision document. The
856 post-demolition survey may result in a loop of activity for Site decommissioning
857 personnel, because if the survey reveals insufficient decommissioning to meet the
858 requirements of the governing decision document, the Site will have to take additional
859 action. Only at such time as the Site project point of contact is satisfied that the post-
860 demolition survey shows that decommissioning is complete, will the survey be deemed
861 final
862

863 3.4.11 Notify Regulators of Completion of Decommissioning

864

865 Upon completion of the relevant final characterization, DOE will notify CDPHE, EPA
866 and the public in writing of the completion of decommissioning for a building or group of
867 buildings. DOE will accomplish notification to the public with a letter to the Rocky Flats
868 Citizen Advisory Board
869

870 3.4.12 Regulatory Oversight and Enforcement

871

872 Consistent with RFCA §§ 272 and 273, throughout the decommissioning process,
873 regulatory personnel will have the ability to inspect Site activities and records for
874 consistency with the requirements of both the governing decision-documents and RFCA
875 generally. Also, consistent with RFCA § 176, CDPHE, or in the case of a site-wide issue,
876 EPA, may issue a stop work order for RFCA-regulated decommissioning activities at any
877 time for the reasons provided therein
878

879 **4 NATIONAL ENVIRONMENTAL POLICY ACT (NEPA) VALUES**

880

881 Because the DPP does not, itself, authorize any specific actions at the Site, the discussion
882 of NEPA values which follows will, of necessity, be general
883

884 **4.1 Relative Impacts on Human Health, Worker Safety, and the Environment**

885

Specific cleanup and closure activities at the Site will either be covered by project specific NEPA documents⁸ or RFCA documents, unless the activity is only in the planning stage in which case it would be premature for a formal NEPA evaluation. Many of the key cleanup and closure decisions facing the Site at this time are in fact subject to DOE complex-wide decisions, such as the movement of waste and SNM from the Site. Consequently, these decisions will be made in the context of broader programmatic environmental impact statements.⁹ Consistent with the Secretarial Policy Statement on NEPA (DOE 1994), the Site will rely on the CERCLA process for review of specific actions to be taken under RFCA and will address NEPA values and public involvement procedures through the RFCA document review process to the extent practicable. In addition, the Cumulative Impacts Document (CID) (DOE 1997) for the Site has been prepared to provide an updated baseline of the cumulative impact to the worker, public, and environment due to Site operations, activities, and environmental conditions based on the Site's change in mission from nuclear weapons production to materials and waste management, accelerated cleanup, consolidation, reuse, and Site closure. The CID serves as an update of the baseline activities and associated environmental impacts reflected in the April 1980 Final Environmental Impact Statement for the Rocky Flats Plant Site (DOE 1980). The CID complements existing NEPA and RFCA documents by making this cumulative impact information available for referencing in future NEPA and RFCA documents.

4.2 Incorporation of NEPA Values

Pursuant to the Secretarial Policy Statement on NEPA, NEPA values for the individual building disposition process will be incorporated as follows:

Type 1 (Buildings free from contamination): In general, the disposition activities conducted for Type 1 buildings will be actions which normally do not require preparation

⁸ Rocky Flats Environmental Technology Site Environmental Assessments since the end of 1994: *Consolidation and Interim Storage of Special Nuclear Materials Environmental Assessment, Rocky Flats Solid Residue Treatment, Repackaging, and Storage Environmental Assessment, Rocky Flats Actinide Solution Processing Environmental Assessment, Radioactive Waste Storage Environmental Assessment, Surface Water Drainage System Environmental Assessment, Rocky Flats Protected Areas Reconfiguration Environmental Assessment, New Sanitary Landfill Environmental Assessment, and National Conversion Pilot Project Stage III Environmental Assessment*. Findings Of No Significant Impact have been issued for each of these environmental assessments.

⁹ Department of Energy Headquarters Programmatic Environmental Impact Statements: *Storage and Disposition of Weapons-Usable Fissile Materials Programmatic Environmental Impact Statement, Environmental Impact Statement for the Continued Operation of the Pantex Plant and Associated Storage of Nuclear Weapons Components, Waste Management Programmatic Environmental Impact Statement for Managing Treatment, Storage, and Disposal of Radioactive and Hazardous Waste, Environmental Impact Statement for the Nevada Test Site and Off-Site Locations in the State of Nevada, and, Supplemental Environmental Impact Statement: Waste Isolation Pilot Plant*.

of an environmental assessment or an environmental impact statement. Specifically, these disposition activities fall within the scope of the categorical exclusions listed in 10 CFR 1021, Appendix B ¹⁰

Type 2 (Buildings without significant contamination or hazards, but in need of decontamination) Many of the disposition activities conducted during the deactivation phase for Type 2 buildings will be actions which normally do not require preparation of an environmental assessment or an environmental impact statement. Specifically, these disposition activities fall within the scope of the categorical exclusions listed in 10 CFR 1021, Appendix B ¹¹. There may be some disposition activities conducted during deactivation which go beyond the scope of a categorical exclusion, therefore, the Site will ensure there is appropriate NEPA coverage prior to conducting these activities ¹². While many of the disposition activities conducted during decommissioning fall within the scope of the categorical exclusions listed in 10 CFR 1021, Appendix B, the incorporation of NEPA values relative to the analysis of impacts to human health, safety, and the environment will be included in the appropriate RFCA decision document (e.g., as one of the three types of accelerated actions listed in RFCA ¶ 96).

Type 3 (buildings with significant contamination and/or hazards) Just as with Type 2 buildings, many of the disposition activities conducted during the deactivation phase will be actions that do not require preparation of a NEPA decision document. And, some disposition activities conducted during deactivation will go beyond the scope of a categorical exclusion, thereby requiring that the Site ensure appropriate NEPA coverage by the incorporation of NEPA values relative to the analysis of impacts to human health, worker safety, and the environment will be included in its DOP.

4.3 Cumulative Impacts Document Analysis

¹⁰ The following categorical exclusions listed in 10 CFR 1021, Appendix B, Subpart D, will most commonly apply to Type 1 buildings: B1 3 - Routine maintenance activities, B1 16 - Removal of asbestos-containing materials, B1 17 - Removal of polychlorinated biphenyl (PCB)-containing items, B1 27 - Disconnection of utility services, and B1 23 - Demolition and subsequent disposal of buildings, equipment, trailers, and support structures.

¹¹ In addition to the categorical exclusion which apply to Type 1 buildings, the following categorical exclusions listed in 10 CFR 1021, Appendix B, Subpart D, will most commonly apply to deactivation activities for Type 2 buildings: B1 28 - Minor activities to place a facility in an environmentally safe condition, and B6 1 - Small-scale, short-term cleanup actions, under RCRA, CERCLA, Atomic Energy Act, or other authorities.

¹² Prior to conducting deactivation activities which exceed the scope of a categorical exclusion the Site will ensure that the proposed activity has been adequately evaluated (a) in an existing site-specific environmental assessment or environmental impact statement, a broader programmatic environmental impact statement, or (b) by preparing a new site-specific environmental assessment or environmental impact statement.

942 The CID describes Site operations with respect to the program areas of SNM
 943 Management, Facility Disposition, Waste Management, Environmental Restoration, and
 944 Site Support Services for both current activities (e g , the baseline case) and the Site's
 945 draft Site closure scenario (e g , the closure case) The closure case is detailed in a draft
 946 planning document prepared in 1996 for the DOE Office of Environmental Management
 947 and updated in 1997 as the *Accelerating Cleanup Focus on 2006*
 948

949 The following are some of the insights gained from the CID impacts analysis and risk
 950 assessments relative to human health, safety, and the environment
 951

- 952 • Radiological and non-radiological risk to the workers, co-located workers, and the
 953 public during normal Site operations are lower than during the weapons production
 954 years
 955
- 956 • Radiological and non-radiological risk to the workers, co-located workers, and the
 957 public during normal Site operations is minimal and well below the requirement of
 958 Clean Air Act
 959
- 960 • Activities associated with SNM Management, residue stabilization, and building
 961 disposition of the "plutonium facilities" (Type 3 buildings) pose the most radiological
 962 risk to the workers, co-located workers, and the public during normal Site operations
 963 The risk of excess doses and latent cancer to the workers, co-located workers, and the
 964 public activities once these activities are completed becomes significantly less
 965
- 966 • Risk from radiological accidents This is a significant risk to the workers, co-located
 967 workers, and the public for the baseline case This risk to the workers, co-located
 968 workers, and the public during the closure case is dominate until around the year 2006
 969 when residue stabilization, SNM consolidation, and deactivation activities associated
 970 with SNM holdup are completed and all SNM has been moved off-site
 971
- 972 • Risk from seismic event This risk contributes over 90% of the overall risk to
 973 workers, co-located workers, and the public that are within 50 miles of the Site for
 974 both the baseline and closure cases
 975
- 976 • Risk from hazardous chemical accident This risk of an accident is low for both the
 977 baseline and closure case The risk to workers and co-located workers could be
 978 significant if effective emergency measures fail or are not implemented Specific
 979 chemicals that offer the greatest risk are ammonia, chlorine, sulfur dioxide, nitric
 980 acid, and propane
 981
- 982 • Closure operations and activities contributing the most to reducing the risks from
 983 accidents to workers, co-located workers, and the public are (a) consolidating
 984 plutonium oxides into building 371, (b) repackaging the dispersible residues into the
 985 pipe/drum component for storage in building 371, (c) removal of plutonium holdup,
 986 (d) shipping transuranic and transuranic mixed waste drums to the Waste Isolation

987 Pilot Plant, (e) shipping SNM from building 371 off-site, and (f) shipping low-level
988 and low-level mixed waste off-site
989
990 • Risk to Site ecology There may be some short-term impacts on wetlands, sensitive
991 habitats, wildlife, and species of special concern There is, however, expected to be
992 no natural resource injury Closure and building disposition activities are not
993 expected to result in the irretrievable or irreversible commitment of any natural
994 resource of the Site
995
996 • Potential cumulative impacts (a) increased surface water runoff and decreased
997 groundwater recharge associated with on-site landfill or correction action
998 management unit caps, (b) short term impacts to wetland and riparian habitat if a
999 flow-through surface water management system for on-site water management ponds
1000 is used, but once the ponds are converted to wetlands, biodiversity is expected to
1001 increase, (c) periodic increases in vehicle traffic along roadways near the Site's two
1002 gates, (d) increased traffic accidents associated off-site shipments of SNM and waste
1003 disposal, and (e) socioeconomic impacts from reductions in Site workforce, although
1004 this impact is expected to be more than offset by the expanding local economy
1005



Department of Energy

ROCKY FLATS FIELD OFFICE
P O BOX 928
GOLDEN, COLORADO 80402-0928

APR 20 1998

98-DOE-01068

Dear Community Members

Due to a printing error, some copies of the Decommissioning Program Plan were sent out without two figures. To ensure that all reviewers get the figures, we are transmitting copies of them to all recipients of record.

If your copy is missing the figures, please replace page 10 with Figure 1 1 1, and page 18 with Figure 3 4-1.

We apologize for any inconvenience this may cause you. If you have questions, please contact me at (303) 966-6246.

Sincerely,

A handwritten signature in cursive script, which appears to read "John J. Rampe".

John J. Rampe
Decontamination and Decommissioning
Program Leader
Rocky Flats Field Office

Enclosures

Distribution List

Mary Harlow, City of Westminster

Hank Stovall, City of Broomfield

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Brady Wilson, Rocky Flats Citizens' Advisory Board

Victor Holm, c/o Rocky Flats Citizens' Advisory Board

Eugene DeMayo, Sierra Club

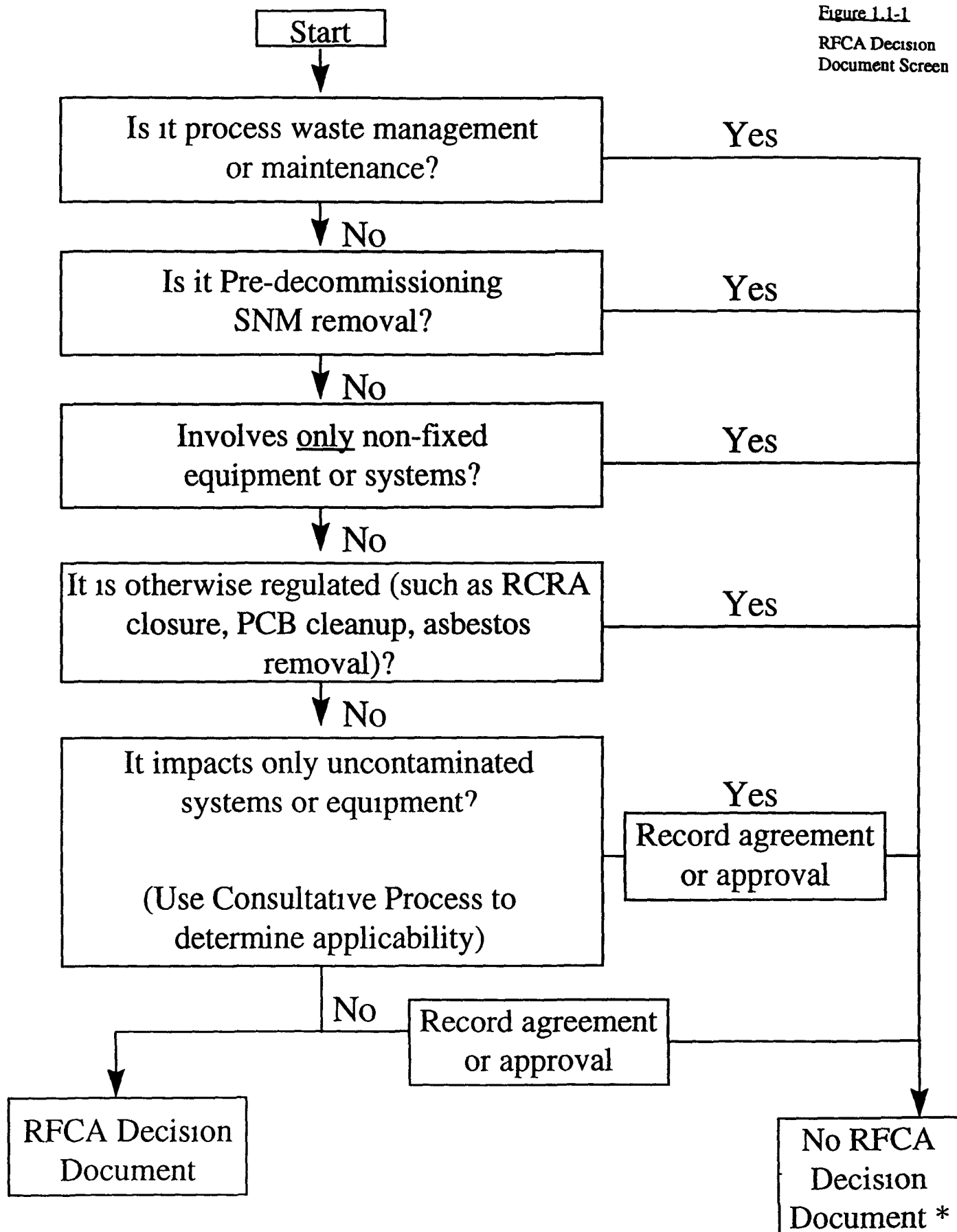
Tom Marshall, Rocky Mountain Peace and Justice Center

LeRoy Moore, Rocky Mountain Peace and Justice Center

Rocky Flats Reading Rooms

Administrative Record

Figure 1.1-1
RFCA Decision
Document Screen



* Consultation will occur, as appropriate, under applicable statute(s), such as, RCRA, CHWA, TSCA, etc

Figure 3.4.1 Regulatory Process Flow for Building Decommissioning

